

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/NL 03/00917

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H02M3/338

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H02M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3 660 724 A (BERGER JAMES K) 2 May 1972 (1972-05-02) cited in the application	1
Y	the whole document	2,3
A	DE 34 27 221 A (OLYMPIA WERKE AG) 30 January 1986 (1986-01-30) cited in the application abstract figure 2	1-11
Y	US 4 272 805 A (IGUCHI YASUhide ET AL) 9 June 1981 (1981-06-09) abstract figure 1	2,3

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*Z\* document member of the same patent family

Date of the actual completion of the international search

28 April 2004

Date of mailing of the international search report

07/05/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Marannino, E.

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/NL 03/00917

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 3660724	A	02-05-1972	NONE	
DE 3427221	A	30-01-1986	DE 3427221 A1	30-01-1986
US 4272805	A	09-06-1981	JP 1204413 C	25-04-1984
			JP 55032428 A	07-03-1980
			JP 58038071 B	20-08-1983